

**From:** "Butner, Gary (CDPH-RHB)" <Gary.Butner@cdph.ca.gov>  
**To:** <susan.durbin@doj.ca.gov>  
**Date:** 8/12/2008 12:37 PM  
**Subject:** FW: NTS Shipment Fact Sheet and Agencies' Roles and Responsibilities  
**Attachments:** NTs Fact Sheet.12.02.03.doc; ROLES and Responsibilities.doc

-----Original Message-----

From: Greger, Robert (CDPH-DFDRS-RHB)  
Sent: Thursday, July 10, 2008 9:09 AM  
To: Butner, Gary (CDPH-RHB)  
Subject: FW: NTS Shipment Fact Sheet and Agencies' Roles and Responsibilities

Another email for Brian Hembacher.

-----Original Message-----

From: Greger, Robert (DHS-RHB)  
Sent: Monday, December 22, 2003 8:42 AM  
To: 'bbyron@energy.state.ca.us'  
Cc: Bailey, Edgar (DHS-RHB)  
Subject: FW: NTS Shipment Fact Sheet and Agencies' Roles and Responsibilities

I've made a couple of minor suggested changes to the Fact Sheet. Give me a call at 714-270-0368 if you want to discuss my reasons for the suggested changes.

-----Original Message-----

From: Barbara Byron [mailto:Bbyron@energy.state.ca.us]  
Sent: Friday, December 19, 2003 10:33 AM  
To: SSchnoebelen@chp.ca.gov; RGreger@dhs.ca.gov;  
Charleen\_Fain-Keslar@dot.ca.gov; ABurow@dtsc.ca.gov; MaryAnn Costamagna;  
Ben\_Tong@oes.ca.gov; Randy\_Schulley@oes.ca.gov; lkirsch@OSPR.DFG.CA.GOV  
Cc: Claudia Chandler  
Subject: NTS Shipment Fact Sheet and Agencies' Roles and Responsibilities

Attached for your final review are:

- (1) Final Draft of the NTS Shipment Fact Sheet,
- (2) Final Draft of the California Agencies' Roles and Responsibilities in Nuclear Waste Transport.

Please review and send any comments to me ASAP. Thank you and have a great holiday.

Barbara Byron

## FACT SHEET

### PLANNED SHIPMENTS OF TRANSURANIC RADIOACTIVE WASTE FROM THE NEVADA TEST SITE THROUGH CALIFORNIA TO THE WASTE ISOLATION PILOT PLANT IN NEW MEXICO

December 18, 2003

Prepared by the California Energy Commission

#### Background

- The U.S. Department of Energy (DOE) is responsible for transporting defense-generated transuranic radioactive waste from DOE facilities throughout the U.S. to a deep geologic disposal facility, called the Waste Isolation Pilot Plant (WIPP) that is located in southern New Mexico. WIPP is located 2,150 feet underground about 26 miles east of Carlsbad, New Mexico.
- Currently DOE is shipping these wastes from five DOE sites to WIPP for permanent disposal. These sites are the Savannah River Site (South Carolina), Rocky Flats Environmental Technology Sites (Colorado), Los Alamos National Laboratory (New Mexico), Idaho National Engineering and Environmental Laboratory (INEEL), and Hanford Site (Washington State). There have been over 2,200 shipments to WIPP from these sites.

#### Description of the Waste

- DOE plans to transport by truck approximately 40-60 shipments of transuranic (TRU) waste from the Nevada Test Site (NTS) in southern Nevada through California to WIPP beginning January 2004
- The waste being disposed of at WIPP is called "transuranic waste", which is waste generated primarily at federal facilities during the research, development and production of nuclear weapons. The wastes consist of such items as laboratory clothing, tools, glove boxes, rubber gloves, glassware and air filters and are contaminated with small amounts of radioactive materials such as plutonium and americium and small amounts of hazardous chemicals.
- All of the TRU waste from NTS will be "contact-handled" waste, which means the radiation it emits is not very penetrating and does not require lead or other types of heavy shielding to protect workers or the public. These containers can be handled with minimum protective gear.
- Inhalation and ingestion are the primary radiation hazards posed by this waste. Even in very small quantities, many transuranic materials can deliver significant internal radiation doses if taken into the body.

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- These shipments are part of a national program to transport tens of thousands of shipments of transuranic waste from federal sites throughout the United States to WIPP. Most of the waste stored at NTS was generated at the Lawrence Livermore National Laboratory in northern California and had previously been transferred to NTS.

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- DOE estimates there will be over 35,000 shipments from 10 major DOE sites and several smaller facilities to WIPP during a 35-year period. There have been over 2200 shipments to WIPP since shipments began in March 1999. WIPP shipments travel through at least 22 states and the lands of at least 15 tribal governments.

### Shipping Container

- All contact-handled waste will be transported to the WIPP in Transuranic Packaging Transporter (TRUPACT-II), an extremely sturdy, reusable shipping cask. Inside the TRUPACT-II, the waste is packaged in 55-gallon steel drums or steel boxes. Each TRUPACT-II holds up to 14 55-gallon drums or two boxes. A WIPP tractor-trailer typically carries 3 TRUPACT II containers per truck, although some may carry only one or two TRUPACT II containers.
- The shipping casks have been approved by the U.S. Nuclear Regulatory Commission (NRC), which has issued a certificate of compliance for use of these casks for transporting this waste. They are constructed to withstand severe accidents without releasing their contents, as confirmed by a series of stringent tests.
- Shipments to WIPP are placarded, per US Department of Transportation requirements, only if the loads contain either (1) a Highway Route Controlled Quantity of radioactive material or (2) if the radiation level from the package exceeds 50 millirem/hour on contact or 1 millirem/hour at one meter from the package's surface; the NTS shipments will likely not be placarded because they are not expected to exceed these limits.

### Contract Carrier

- The federal Department of Transportation sets standards for drivers of trucks that carry hazardous materials. DOE, recognizing the heightened public interest in radioactive material shipments, agreed to go beyond these regulations for its WIPP drivers and carriers.
- DOE adopted rigorous driver and carrier performance requirements to ensure that only high quality drivers and trucks are used for WIPP shipments. The drivers must have extensive, accident free experience and are tested for drug and alcohol abuse. States conduct regular safety audits of the carriers.

## **Safety Inspections**

- All transuranic waste shipments are inspected by state inspectors using enhanced truck safety inspection standards. These inspections take place before the trucks leave the DOE sites and periodically are done along the route.
- Trucks must be in top working order and inspections include brakes, tires, lights, turn signals, cask tie downs and other items. Drivers' logs are checked to ensure drivers have not been too long at the wheel. Radiation surveys are done of the shipping containers to ensure that they meet radiological standards.

## **Accident Prevention and Emergency Response**

- The Western Governors' Association (WGA) and DOE have developed over the past ten years a set of transport safety and emergency response protocols that exceed federal safety requirements. These approved protocols include the use of specially trained drivers, truck and cask inspections, shipment tracking using satellite-based tracking and communication systems, weather and road condition checks prior to departure, safe parking, route selection protocols, training for state and local emergency responders, and emergency response plans. These protocols will be used in these shipments.

## **California's Preparation**

- California's preparation for these shipments is coordinated through an interagency working group that is coordinated, since 1989, by the California Energy Commission (Energy Commission). The Energy Commission was designated by the Governor to represent California on the WGA WIPP Technical Advisory Group and established a state agencies' working group called the California Nuclear Transport Working Group to prepare for WIPP shipments.
- This Working Group is comprised of nine state agencies with regulatory authority or operational responsibilities with respect to nuclear shipment safety and emergency response. It is comprised of senior staff from the Energy Commission, Department of Health Services, Office of Emergency Services, Department of Transportation, Emergency Medical Services Authority, Environmental Protection Agency, Department of Fish and Game, Highway Patrol, and the Public Utilities Commission Railroad Safety. These California agencies, in cooperation with the Western Governors' Association and the DOE, have prepared a Transport Safety and Emergency Response Plan for these shipments.
- To help ensure that these shipments are conducted safely and that emergency response preparation is in place, the following is being taken:

1. Shipment Inspections and Escorts: The California Highway Patrol plans to inspect and escort at least the initial shipments. Prior to departure from the Nevada Test Site, trucks and casks must pass a rigorous vehicle safety inspection by the Nevada Highway Patrol and DOE.
2. Emergency Preparedness: The Governor's Office of Emergency Services has coordinated planning and emergency response preparation for WIPP shipments. Since 2000, California has received funding to plan and prepare for these shipments. Funds have been used to develop State plans for responding to an accident involving these shipments, and to train and equip state and local emergency responders along the route in California. Inyo and San Bernardino Counties have received emergency response training and radiological detection instruments along the route.
3. Routes and Advanced Notification: The California Highway Patrol is the lead agency for designating routes for highway radioactive material shipments, is the Governor's designee for advance notice of specified radioactive material shipments, and represents California on the Security Subcommittee of the WGA WIPP Transport Advisory Group.
4. Shipment Tracking: The shipment will be tracked at the Office of Emergency Services in cooperation with the California Highway Patrol using the DOE TRANSCOM satellite-based tracking and communication system. TRANSCOM users (includes authorized DOE, state, and tribal users) have the ability to track shipments, shipping schedules, bills of lading, and emergency response information.
5. Bad Weather and Road Conditions: The shipment will avoid adverse weather or bad road conditions. Weather and road condition checks will be conducted prior to departure. The California Department of Transportation has provided information on road and highway conditions along the route through California. The California Highway Patrol will assure access to appropriate safe parking areas in the event of bad weather or road conditions during transit in California. The shipments will be scheduled to avoid peak tourist events in Death Valley National Park.

#### Planned Route

- Under the WGA/DOE protocols, DOE is required to identify routes that are acceptable to the states along the routes prior to shipments. DOE has agreed with states to follow the US Department of Transportation routing guidelines for radioactive material shipments. DOE primarily uses the interstates for WIPP shipments and consults with states regarding the use of routing alternatives. DOE has only used alternate routes for WIPP shipments that were agreed to or designated by states.

- Since 1999, California officials have objected to DOE's increasing use of predominantly California routes in southeastern California for shipments of nuclear waste to NTS from federal facilities in eastern states. There are shorter, more direct, and better quality alternate routes in Nevada to and from NTS that have more timely emergency response capability than California routes in that region.
- DOE originally planned to begin these shipments in July 2003, over California's objections to DOE's proposed route in California for the NTS to WIPP shipments. However, DOE postponed these shipments, following requests by the Western Governors' Association (WGA) and Senator Dianne Feinstein for DOE to postpone these shipments to allow time for further negotiations with California and Nevada on the route.
- The Western Governors' Association mediated negotiations between the affected states and DOE regarding these routes. In the spirit of cooperation, California through WGA offered a compromise which would allow DOE to use the California route for the first half of the NTS to WIPP shipments, as long as DOE and states agreed to an alternate route and timetable for the second half of shipments. California further conditioned these shipments upon DOE's agreeing to certain terms including that the first set of shipments would be completed in 2004, that the second set of shipments would exclude predominantly California routes, and that no large quantity shipments, called "highway route-controlled quantity shipments", would use this route without California's prior approval.

#### **For More Information**

For additional information, please contact the following: the Western Governors' Association at [www.westgov.org/wga/initiatives/wipp/radwaste.htm](http://www.westgov.org/wga/initiatives/wipp/radwaste.htm); the Department of Energy at [www.wipp.carlsbad.nm.us](http://www.wipp.carlsbad.nm.us);

## CALIFORNIA AGENCIES' ROLES AND RESPONSIBILITIES IN NUCLEAR WASTE TRANSPORT<sup>1</sup>

December 18, 2003

**California Energy Commission<sup>2</sup>:** coordinates California interagency working groups on nuclear waste transport and on the proposed Yucca Mt. High-Level Radioactive Waste Repository; serves as the State of California liaison to the US Nuclear Regulatory Commission and the federal Department of Energy; Governor's designee to represent California on the Western Governors' Association WIPP Transport Technical Advisory Group.

**California Department of Fish and Game:** State agency coordinator (State Incident Commander) for off-highway hazardous material incidents; lead agency for responding to hazardous material incidents in all state waters and waterways.

**California Department of Health Services:** licensing, inspection, and enforcement related to radioactive materials use and transport, including radioactive material shipment inspections; oversees mitigation efforts in the event of an accident; emergency response; licensing agency for commercial low-level waste facility

**California Department of Transportation:** assists in traffic management; mitigation of highway accidents, cleanup of hazardous materials spills within state highway rights-of-way, and coordinates the transportation permit program for oversize/overweight trucks.

**California Emergency Medical Services Authority (EMSA):** Oversees through the counties Regional Disaster Medical and Health Coordinators; coordinates state and local medical and health disaster assistance and medical emergency response preparation; coordinates distribution of medical equipment, supplies and personnel to hospitals.

**California Environmental Protection Agency Department of Toxic Substances Control:** Responsible for organizing and coordinating Railroad Accident Prevention and Immediate Deployment (RAPID) Force. The RAPID Force is comprised of Cal EPA Departments and other state agencies that provide assistance following railroad or highway transportation hazardous material incidents. The RAPID Force is a component of the Incident Command System. CalEPA has contracts in place to dispatch cleaning contractors for accidents involving hazardous or mixed waste.

**California Highway Patrol:** designates routes for highway radioactive material shipments; Governor's designee for advance notice of specified radioactive material shipments; security; represents California on the Security Subcommittee of the Western Governors' Association WIPP Transport Advisory Group; Incident Commander for on-highway hazardous material-involved accidents and incidents; enforces truck and driver safety regulations.

**California Public Utilities Commission:** rail safety, inspection and enforcement; federally certified to cooperate with the Federal Railroad Administration in conducting detailed inspections of identified rail routes including track, equipment, signal and train control, railroad operating practices, and compliance with state and federal hazardous materials and other applicable safety regulations.

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<sup>1</sup> Updated December 8, 2003

<sup>2</sup> Has coordinated the California Transuranic Transport Working Group since 1989, the Yucca Mountain High-Level Waste Working Groups since 1989, and the California Foreign Spent Fuel Transportation Group since 1996;

**Governor's Office of Emergency Services:** coordinates state and local emergency response preparation, including training, providing equipment, and exercises as well as managing statewide radiological emergency response system; lead agency for the Radiological Subcommittee for the State Strategic Committee on Terrorism (SSCOT).